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AUTHOR	Royce, Daniel
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ABSTRACT

The Teacher List Validation Study was conducted to evaluate the quality of the Teacher Listing Record (TLR), a form used during the Schools and Staffing Survey (SASS) to obtain a list of teachers in each school. The SASS is a set of four inter-related surveys of public and private elementary and secondary schools, districts, teachers, and administrators conducted by the National Center for Education Statistics (NCES). For the first component of the study, 100 private and 100 public schools were selected for reinterview to determine whether the TLRs had been completed accurately. In the second component of the study, an additional 100 schools and 100 districts were reinterviewed to determine whether the TLR or the school questionnaire provided a more accurate account of teachers. Data suggest that public schools were more accurate listing teachers than were school districts. The types of errors usually made were characterized. Private schools incorrectly included nonteachers and incorrectly excluded teachers, although the instances were few in each teacher/nonteacher group. Both public and private schools were more accurate in listing teachers using the TLR than the SASS school questionnaire. Part-time teachers were most often omitted, and the types of nonteachers most often included erroneously were librarians and prekindergarten teachers. Two attachments describe the study sample and teacher/nonteacher categories for the report. (Contains 6 graphs and 14 tables.) (SLD)

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The Results of the

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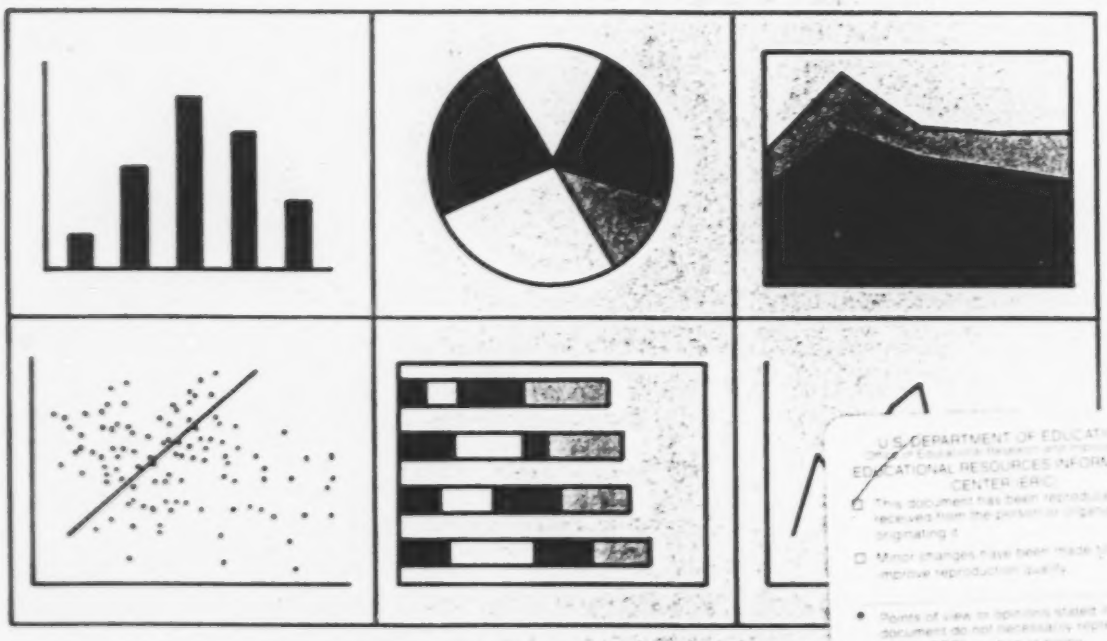
Working Paper No. 95-09 February 199



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The Results of the

1993 Teacher List Validation Study (TLVS)

Working Paper No. 95-09 February 1995

Contact: Dan Kasprzyk
Special Surveys and Analysis Branch
(202) 219-1325

U.S. Department of Education
Richard W. Riley
Secretary

Office of Educational Research and Improvement
Sharon P. Robinson
Assistant Secretary

National Center for Education Statistics
Emerson J. Elliott
Commissioner

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February 1995

Foreword

Each year a large number of written documents are generated by NCES staff and individuals commissioned by NCES which provide preliminary analyses of survey results and address technical, methodological, and evaluation issues. Even though they are not formally published, these documents reflect a tremendous amount of unique expertise, knowledge, and experience.

The ***Working Paper Series*** was created in order to preserve the valuable information contained in these documents and to promote the sharing of valuable work experience and knowledge. However, these documents were prepared under different formats and did not undergo vigorous NCES publication review and editing prior to their inclusion in the series. Consequently, we encourage users of the series to consult the individual authors for citations.

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Susan Ahmed
Acting Associate Commissioner
Statistical Standards and
Methodology Division

Samuel S. Peng
Branch Chief
Statistical Service and
Methodological Research Branch

The Results of the 1993 Teacher List Validation Study (TLVS)

By: Daniel Royce
Quality Assurance and Evaluation Branch
Demographic Statistical Methods Division
June 3, 1994

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I. Summary

A. Purpose

We conducted the Teacher List Validation Study to evaluate the quality of our Teacher Listing Record (TLR). This form is used during the Schools and Staffing Survey (SASS) to obtain a list of teachers in each school.

We designed the study to be primarily qualitative in nature. Also, because we selected a non-random sample, we conducted no statistical tests on the results.

B. Major Findings

1. Reinterview and Reconciliation of the TLR

- The data suggest that the public schools were more accurate listing teachers than their corresponding school district (Local Education Agency, or LEA).
- Public schools and LEAs often omitted part-time and specialized subject matter teachers from the TLR. (Attachment B contains a complete description of the teacher groups.)
- LEAs often incorrectly listed guidance counselors, while public schools most often erroneously listed librarians and speech therapists as teachers.
- Although the private schools incorrectly included non-teachers and incorrectly excluded teachers, the instances were few in each teacher/non-teacher group.

2. TLR vs. School Questionnaire

- The data suggest that both the public and private schools were more accurate listing teachers using the TLR than the school questionnaire (SASS-3X).
- The public and private schools often omitted part-time teachers when reporting their teacher count using the school questionnaire.
- The types of non-teachers most often included in error on the SASS-3X by the public and private schools were librarians and pre-k teachers.

C. Recommendations

- Continue to use the public schools, rather than the LEAs, to obtain teacher counts using the TLR. Although the schools were not completely accurate, they were more accurate at listing teachers than their corresponding LEA.

- The schools appeared to provide a more accurate teacher count using the TLR, rather than the school questionnaire. Even though this was the case, the design of the TLR and the instructions need additional research.

  We used the results of this study to revise the TLR for the 1993-94 SASS. It contained more specific instructions regarding who should and should not be included on the list.

  The Center for Survey Methods Research (CSMR) has implemented a program of cognitive research to improve the TLR. The results of this research will be available in the fall of 1994.

II. Methodology

During the SASS, the TLR is used to obtain a list of teachers in each school. The Census Bureau then selects a sample of teachers from each school for the teacher survey portion of SASS.

The study was prompted by the fact that both the 1987-88 and 1990-91 SASS estimated different numbers of teachers using the TLR compared with the school questionnaire. In the 1987-88 SASS, the schools, on average, reported fewer teachers on the TLR compared to the school questionnaire. In the 1990-91 SASS, the schools reported different numbers of teachers on these two forms. The TLR is always mailed to the schools at the beginning of the fall semester. The school questionnaire (in the 1987-88 and 1990-91 SASSs) was mailed to the schools in the beginning of the spring semester.

The study contained two components, each with different objectives. The objectives for component 1 were to:

1) determine if the schools filled out the TLR per our instructions (i.e., the instructions printed on the form),

2) determine if the schools listed eligible in-scope teachers,

3) determine if the school districts (Local Education Agencies, or LEAs), rather than the public schools, could provide more accurate listings of teachers.

The objective of component 2 was to determine whether the school questionnaire or the TLR produced a more accurate count of teachers in the school. The assumption was that the counts from the school questionnaire are more accurate.

A general objective for both components was to find out if certain types of teachers/non-teachers created problems for the schools when computing the teacher counts (i.e., teachers were systematically missed or included incorrectly and/or their definitions were misunderstood).

A. Component 1: Reinterview and Reconciliation of the TLR

In component 1 we compared the teacher count obtained from the TLR completed by the public school to the one completed by the LEA for that school. For private schools we compared the teacher count on the TLR completed by the school to the teacher count as reported by the school in the 1991-92 PSS[1]. We selected the 200 reinterview cases (100 public and 100 private) with the largest percent differences between the counts.

1. Sample Design

The sample for component 1 consisted of 300 private schools, 290 public schools, and 254 LEAs. (Some LEAs had more than one sample school.) This sample did not overlap with the component 2 sample.

Attachment A contains a more detailed description of the sample.

When we received approximately 85 percent of the TLRs, we began selecting our reinterview samples. (We couldn't wait until we received all of the TLRs to select the reinterview sample because it would have been too late to begin the reinterview.) We selected 100 public schools (with their corresponding LEA) and 100 private schools.

Note: The schools (and LEAs, for public schools) were eligible for reinterview only if they sent in a completed TLR. If either a public school or its LEA did not return a TLR, they were not eligible for the reinterview sample.

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[1] The PSS refers to the 1991-92 Private School Survey. This survey collects data from private schools on student enrollment, student race/ethnicity, school programs, number of teachers, and type/location/affiliation of school.

a. Public Schools

We matched each public school TLR with its corresponding LEA TLR. We then selected the 100 public schools with the highest difference rate as defined below:

L = number of teachers reported on the **LEA TLR only**
S = number of teachers reported on the **school TLR only**
B = number of teachers reported on **both TLRs**

$$\text{difference rate} = \frac{(L + S)}{(L + S + B)}$$

The difference rates ranged from .87 to 0. The 100 public schools that we selected for reinterview ranged from .87 to .11.

b. Private Schools

We selected the 100 private schools with the highest difference rate (positive or negative) as described below:

S = total number of teachers reported on **school TLR**
P = total number of teachers reported in **the 1991-92 PSS**

$$\text{difference rate} = \frac{(S - P)}{S}$$

The difference rates ranged from 23.5 to 0. The 100 private schools that we selected for reinterview ranged from 23.5 to .18.

Note: Unlike the public schools, we could not consider the actual teachers listed in developing this rate because the PSS only provided counts - not names.

2. Procedures / Timing

In mid-November, 1992, a TLR was mailed to each private school, public school, and each public school's LEA (254 LEAs in all - 290 questionnaires). Telephone nonresponse follow-up for these questionnaires began in the regional offices in mid-December. Closeout was at the end of January, 1993. (This timing was consistent with past SASSs.)

Reinterview began in mid-February, 1993 and ended at the end of March.

The reinterviewers were given no formal training. They were instructed to read the Reinterviewer Instructions Memorandum, and use their overall experience and knowledge on conducting reinterviews. The field representatives that were used were familiar with conducting reinterviews.

Note: The original TLRs were edited in the regional offices. Contrary to what is done normally (i.e., in past SASSs) we decided that if the regions found errors on the TLRs, they should not contact the schools to correct them. Instead, they documented the errors on the TLRs. We hoped to find out the reasons for the errors during the reinterview.

a. Public Schools

Of the 100 public schools selected for reinterview, 50 were conducted by personal visit, and 50 by telephone. The reinterview method was assigned by ranking the 100 cases in order from largest difference rate to smallest, and then alternating, beginning at the top of the list, by personal visit and telephone.

We instructed reinterviewers to contact only the school (not the LEA) for these reinterviews.

i. **50 personal visit cases**

For the 50 personal visit cases, the original school respondent completed another TLR, thinking aloud as he/she filled out the form. Our goal here was to determine how the respondent interpreted our instructions.

Once this was done, we instructed the reinterviewer to compare the reinterview list with the original list filled out by the respondent, and reconcile any differences. The reinterviewer was also instructed to determine why the LEA reported certain teachers that the school did not.

ii. **50 telephone cases**

For the 50 telephone cases, the respondent did not complete another TLR. Instead, the reinterviewer was instructed to reconcile the differences between the TLR filled out by the school and the one filled out by the LEA.

We mailed back to the school a copy of the original TLRs completed by the school and the LEA, along with a letter describing the study and that someone from the Census Bureau would contact them regarding the reconciliation. This was done so that the respondent would have the necessary information when the reinterviewer called.

b. Private Schools

Of the 100 private schools selected for reinterview, 50 were conducted by personal visit, and 50 by telephone. These were assigned by ranking the 100 schools from the largest school (in terms of size, not difference rate) to the smallest. We determined the size of the school by the number of teachers in the school as reported on the original TLR. The larger 50 schools were assigned personal visit reinterviews, while the smaller 50 were assigned telephone reinterviews. We did this because it would be easier to conduct a reinterview for a smaller school over the phone than it would for a larger school. The largest school in the telephone sample contained 11 teachers.

Note: We did not conduct a reinterview for the public school telephone reinterview cases. We reconciled the differences between the school TLR and the LEA TLR. Therefore, it was not necessary to purposely include the smaller sized schools in the public telephone reinterview sample.

i. **50 personal visit cases**

The reinterviewers conducted the 50 personal visit cases the same way as the 50 personal visit cases for public schools. The reinterviewer instructed the school respondent to complete another TLR, thinking aloud as he/she filled out the form.

Once completed, the reinterviewer compared the reinterview TLR with the original TLR filled out by the respondent, and reconciled any differences.

ii. **50 telephone cases**

The 50 telephone cases were done the same way as the 50 personal visit cases. The respondent completed another TLR over the phone. The reinterviewer then reconciled the differences between the original TLR and the reinterview TLR.

B. Component 2: TLR vs. School Questionnaire

In component 2, we compared the teacher count reported by the school on the TLR to the teacher count reported on the school questionnaire. No LEAs were involved in component 2. For the reinterview, we selected 200 cases (100 public and 100 private) with the largest differences between these counts.

1. Sample Design

The sample consisted of 300 private schools and 290 public schools. This sample was selected the same way as the component 1 sample. (See Attachment A.)

We selected the component 2 reinterview sample in two phases. We did this because the school questionnaires came in slower than expected. When we received approximately 50 percent of the school questionnaires, we selected phase one of our reinterview sample. After we received about 90 percent of the school questionnaires, we selected phase two of the reinterview sample. We selected a total of 100 public schools and 100 private schools. We selected the public and private school reinterview samples the same way.

We selected the 100 public schools and 100 private schools with the highest difference rate (positive or negative) as described below:

T = number of teachers reported on **Teacher Listing Record (TLR)**
X = number of teachers reported on **school questionnaire (SASS-3X)**

$$\text{difference rate} = \frac{(T - X)}{T}$$

The difference rates ranged from .98 to 0 for the public schools (.98 to .05 for the 100 public schools selected for reinterview), and from 2.0 to 0 for the private schools (2.0 to .07 for the 100 private schools selected for reinterview).

2. Procedures / Timing

Component 2 began by mailing a TLR to each public school and private school in the Component 2 sample. The timing for this mailing was the same as Component 1. (They were mailed in mid-November, 1992. Telephone nonresponse follow-up began in the regional offices in mid-December, and closeout was at the end of January, 1993. This timing was consistent with past implementations of the SASS.)

At the end of February we mailed a SASS-3(X), school questionnaire to each school in the Component 2 sample. Telephone nonresponse follow-up began at the end of March, and closeout was at the end of May. (This timing was consistent with past implementations of the SASS.)

The SASS-3(X) was a field test version of the school questionnaire. It was being tested in preparation for the 1993-94 SASS. It contained questions about the characteristics of a school. Included in the questionnaire were questions regarding the number of teachers in the school. We were interested in these teacher count questions only.

Reinterview began at the beginning of May, and ended in mid-June.

Each public school and private school reinterview in component 2 was conducted by telephone. We mailed back to the school a copy of the original TLR and school questionnaire filled out by the school, along with a letter describing the study and that someone from the Census Bureau would contact them regarding the reconciliation.. This was done so that the respondent would have the necessary information when the reinterviewer called.

The 100 public school and 100 private school respondents did not complete another TLR (as was done in component 1). Instead, the reinterviewer reconciled the differences between the teacher count reported on the original TLR, and the teacher count reported on the school questionnaire.

C. Determining the Actual Count of Teachers

Before we could do the data analysis, we had to determine the actual count of teachers in each school (i.e., the "truth" count). We used this count as the basis for our comparisons. We did this by:

- reviewing the instructions on how to complete the TLR and school questionnaire
- reviewing the TLR completed by the school (and LEA, for public schools)
- reviewing the reinterview TLRs completed by the schools (component 1 only)
- reviewing the school questionnaire completed by the schools (component 2 only)
- reviewing the explanations and notes provided by the reinterviewer regarding the list of teachers on the TLRs, the count of teachers on the TLRs, and the count of teachers on the school questionnaires
- using the definitions and guidelines that NCES has set up regarding (for our purposes) who is, and who is not a teacher.

D. Limitations

Certain aspects of the study limited us to what we could and did find out.

First of all, this study was designed to be qualitative in nature rather than quantitative. We weren't trying to get specific numbers on how many teachers were erroneously missed or non-teachers that were erroneously included. Rather, we attempted to find out the types of teachers/non-teachers that the schools included or excluded in their counts. For that reason, we did not find out, for example, the exact number of librarians that were being counted as teachers. We did, however, find this out at the school level (i.e., how many schools were including librarians in error).

Second, we wanted to find out reasons why the schools excluded certain teachers and included persons that should not have been included. Unfortunately, the reinterview and reconciliation did not gather adequate reasons. Most of the respondents simply said they "forgot about that person" or "I thought this person should/shouldn't be included." Other respondents simply didn't provide reasons.

Third, our initial sample was not unbiased or random. We purposely wanted in the sample those schools that historically reported (based on past SASSs) inconsistent teacher counts using the TLR and the school questionnaire. (Attachment A describes the sample in more detail.) The reinterview samples also were not unbiased or random.

Because of the way we selected the samples, statistical testing on the results would be inappropriate. Although we do say that certain counts are greater than others, there is no statistical evidence that this is so. We merely "eyeballed" the numbers.

III. Results

The results in this report are shown separately by component (1 and 2). Within each component we show results for public cases and private cases. The component 1 public school cases are also shown separately by telephone reinterview and personal visit reinterview. We do not have separate sections for the private school reinterview telephone and personal visit cases. Other than the method of reinterview, the procedures were the same for these cases. There was also no major procedural difference between the private telephone reinterview cases and the private personal visit reinterview cases.

We compared the counts obtained from the TLRs (components 1 and 2) and school questionnaires (component 2, only) to the actual count of teachers in the school. We used only those cases where we could determine a "truth count". (See table below.) For public schools, we also compared the count of teachers from the CCD[2] to the truth count. For private schools, we compared the count of teachers from the PSS to the truth count in component 2 only. We already know that these counts will differ for the cases in component 1 because we selected this sample based on the large difference between the TLR count and the PSS count.

We discovered that the CCD and PSS counts were not very accurate. This was probably due to the fact that they were not current counts. The CCD counts were from the 1990-91 school year. The PSS counts were from 1991-92.

We also kept track of the different types of teachers that the schools (and LEAs, for public schools) incorrectly EXCLUDED in their TLR and school questionnaire counts, and the different types of non-teachers that were incorrectly INCLUDED in their counts. Attachment B contains the 19 different groups that we used to classify these types of teachers and non-teachers. We used all completed reinterviews for this analysis. (See table on next page.)

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[2] Common Core of Data (CCD) - This file contains public school data provided and updated by the state each year. LEAs provide the schools' data to the state. We used the teacher counts from the 1990-91 CCD file for the 1993 TLVS.

The table below describes the response rates.

	Component 1				Component 2	
	Public		Private			
	Phone	PV[3]	Phone	PV	Public	Private
Total Sample	50	50	50	50	100	100
Complete Reinterviews	50	49	47	48	100	98
Refusals	0	1	2	2	0	0
Unable to Contact	0	0	1	0	0	2
"Truth" Count Determined[4]	50	49	47	48	88	88

A. Component 1: Reinterview and Reconciliation of the TLR

1. Public School - Telephone Reinterview

Of the 50 LEA TLRs, 14 contained the correct number of teachers in the school and 27 were within ± 5 percent of the truth count. Nineteen school TLRs contained the correct count, and 34 were within 5 percent of the truth count. The LEA and school counts (the exact matches and the counts within 5 percent) appear consistent. The data suggest that these counts are, however, greater than the CCD counts (6 exact matches, 16 within 5 percent). See table 1 and graph 1 on next page.

[3] PV = personal visit reinterview

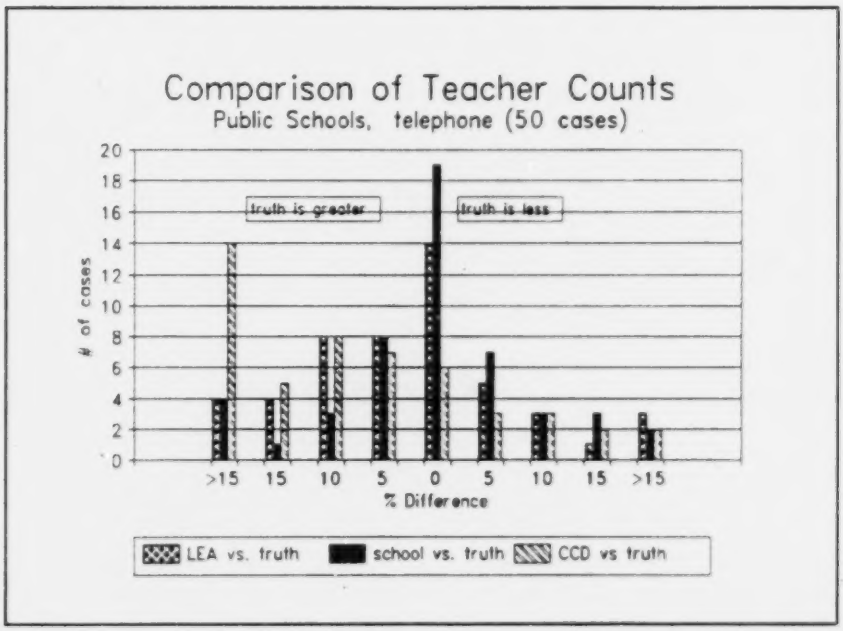
[4] We used these cases for the percent difference analysis.

Table 1 Distribution of Public Schools/LEAs by Percent Difference from Truth Count

Source of Data	No. of schools/LEAs					
	0%	0<P≤5	5<P≤10	10<P≤15	P>15	total
LEA TLR	14	13	11	5	7	50
school TLR	19	15	6	4	6	50
CCD count	6	10	11	7	16	50

- P = the percent difference from the truth count

Graph 1



2. Public School - Personal Visit Reinterview

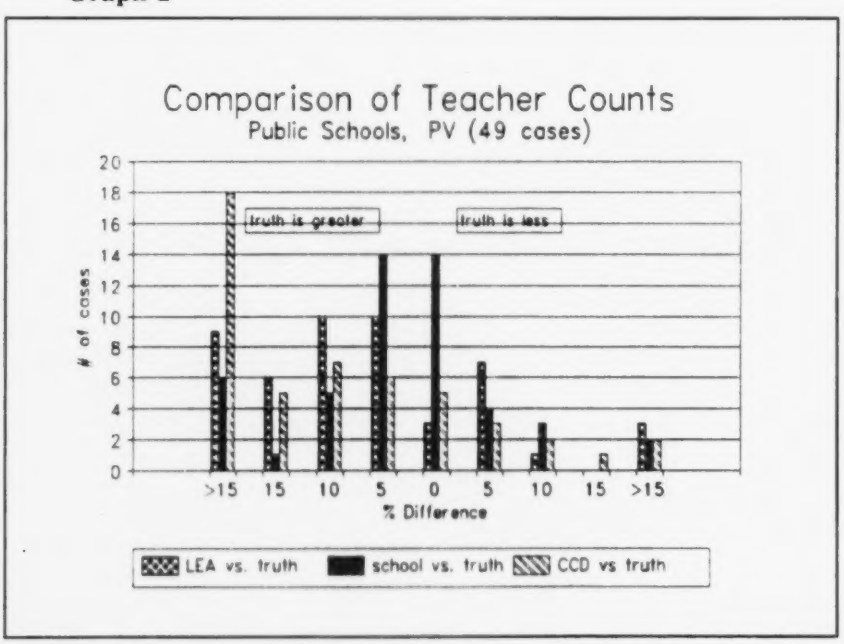
Only 3 of the 49 LEA TLRs contained the correct count of teachers in the school. Twenty were within 5 percent of the truth count. Fourteen school TLRs contained the correct count, while 32 were within 5 percent of the truth count. The data suggest that the school counts (both the exact match and the count within 5 percent) are greater than both the LEA counts and the CCD counts (5 exact matches, 14 within 5 percent). The LEA counts appear fairly consistent with the CCD counts. See table 2 and graph 2.

Table 2 Distribution of Public Schools/LEAs by Percent Difference from Truth Count

Source of Data	No. of schools/LEAs					
	0%	0<P≤5	5<P≤10	10<P≤15	P>15	total
LEA TLR	3	17	11	6	12	49
school TLR	14	18	8	1	8	49
CCD count	5	9	9	6	20	49

- P = the percent difference from the truth count

Graph 2



3. Public School - Total

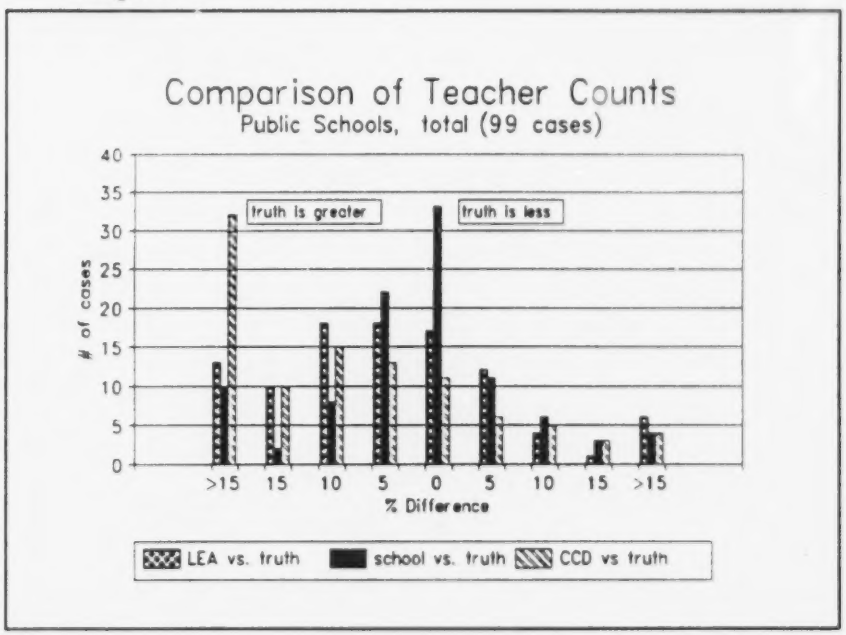
Of the 99 LEA TLRs, 17 contained the correct count of teachers in the school, while 47 were within 5 percent of the truth count. Thirty-three school TLRs contained the correct count, and 66 were within 5 percent of the truth count. The data suggest that the school counts (the exact match and the count within ± 5 percent) are greater than both the LEA counts and the CCD counts (11 exact matches, 30 within 5 percent of the truth count). The LEA counts appear greater than the CCD counts. See table 3 and graph 3.

Table 3 Distribution of Public Schools/LEAs by Percent Difference from Truth Count

Source of Data	No. of schools/LEAs					
	0%	0<P≤5	5<P≤10	10<P≤15	P>15	total
LEA TLR	17	30	22	11	19	99
school TLR	33	33	14	5	14	99
CCD count	11	19	20	13	36	99

- P = the percent difference from the truth count

Graph 3



Of the 99 public schools in the component 1 reinterview sample, we discovered, through the reinterview, that the LEAs and schools **incorrectly excluded** the following types of teachers the most: (See Attachment B for a complete list and description of the groups of teachers and non-teachers.)

Table 4 Types of Teachers Excluded on TLR by LEAs and Public Schools

Teacher Category	Number of LEAs	Number of schools
• general full-time	30	22
• part-time	21	15
• specialized subject matter	17	15
• special ed.	10	10
• long-term sub	10	6
• itinerant	9	5

Note: Only one public school (and it's LEA) missed a homebound teacher. It was picked up during the reinterview. This was the only instance in the study where a school (public or private) mentioned they had a homebound teacher.

We discovered that the LEAs and schools **incorrectly included** the following types of non-teachers the most:

Table 5 Types of Non-teachers Included on TLR by LEAs and Public Schools

Non-teacher Category	Number of LEAs	Number of schools
• other non-teacher	18	11
• librarian	10	18
• speech therapist	10	18
• guidance counselor	14	9
• principal / asst. principal	6	3
• other school staff	5	4

4. Private School - Total

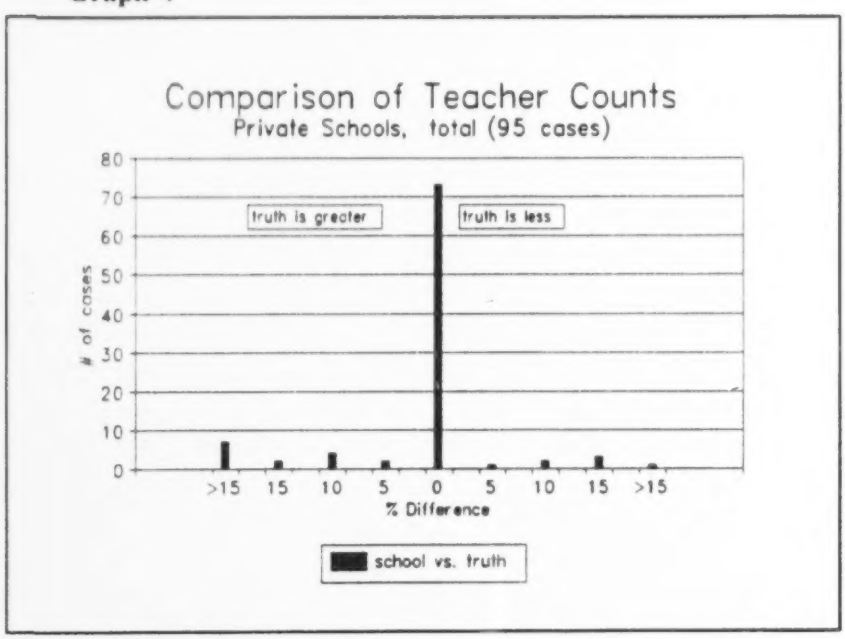
Seventy-three of 95 school TLRs contained the correct count of teachers in the school, while 76 were within 5 percent of the truth count. The data suggest that there is no major difference between the telephone cases and the personal visit cases. See table 6 and graph 4.

Table 6 Distribution of Private Schools by Mode of Reinterview and by Percent Difference from Truth Count

Source of Data	No. of schools					
	0%	0<P≤5	5<P≤10	10<P≤15	P>15	total
telephone	39	0	2	4	3	47
PV	34	3	4	2	5	48
total	73	3	6	5	8	95

- P = the percent difference from the truth count

Graph 4



Overall, the 95 private schools in the component 1 reinterview sample didn't seem to have a lot of problems listing teachers (that is, not nearly as many as the public schools). Of these schools, we discovered that the schools **incorrectly excluded** the following types of teachers the most:

Table 7 Types of Teachers Excluded on TLR by Private Schools

Teacher Category	Number of original TLRs	Number of reint. TLRs
• general full-time	5	3
• subject matter	4	2
• specialized subject matter	2	4
• part-time	1	3
• other teacher	2	1

We discovered that the schools **incorrectly included** the following types of non-teachers the most:

Table 8 Types of Non-teachers Included on TLR by Private Schools

Non-teacher Category	Number of original TLRs	Number of reint. TLRs
• principal / asst. principal	4	6
• pre-K	2	7
• librarian	2	5
• other non-teacher	2	3

B. Component 2: TLR vs. School Questionnaire

1. Public Schools

Fifty-five of 88 school TLRs contained the correct count of teachers in the school, while 68 were within 5 percent of the truth count. The SASS-3X count was correct for 12 cases, while 26 were within 5 percent of the truth count. The data suggest that the TLR counts are greater than the 3X counts, and both the TLR counts and the 3X counts are greater than the

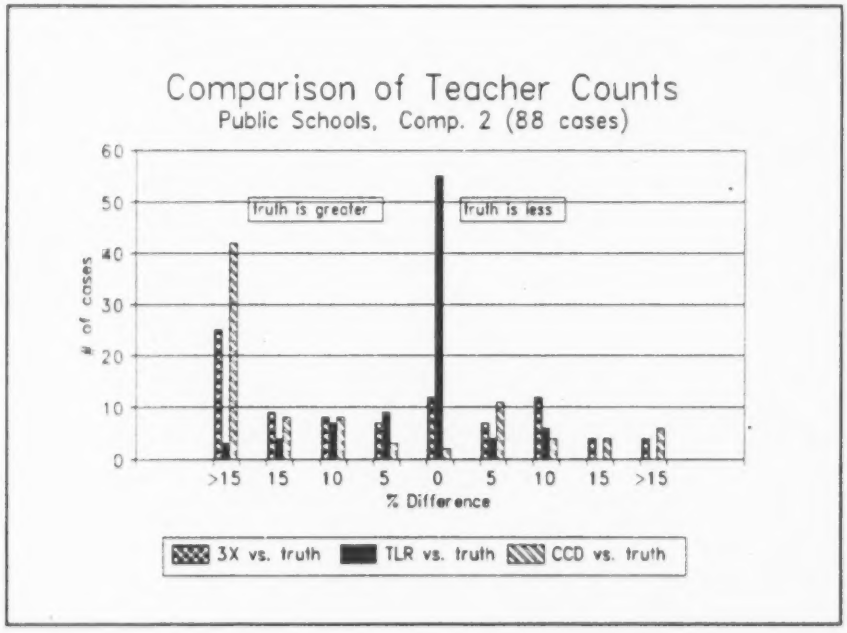
CCD counts (2 exact matches, 16 within 5 percent of the actual count). See table 9 and graph 5.

Table 9 Distribution of Public Schools by Percent Difference from Truth Count

Source of Data	No. of schools					
	0%	0<P≤5	5<P≤10	10<P≤15	P>15	total
3X quest.	12	14	20	13	29	88
school TLR	55	13	13	4	3	88
CCD count	2	14	12	12	48	88

- P = the percent difference from the truth count

Graph 5



Of the 100 public schools in the component 2 reinterview sample, we discovered that the schools **incorrectly excluded** the following types of teachers the most:

Table 10 Types of Teachers Excluded on TLR and School Questionnaire (SASS-3X) by Public Schools

Teacher Category	Number of 3Xs	Number of TLRs
• part-time	18	10
• general full-time	15	5
• special ed.	3	9
• specialized subject matter	2	6
• subject matter	0	5
• itinerant	2	3
• Chapter 1	2	3

We discovered that the schools **incorrectly included** the following types of non-teachers the most:

Table 11 Types of Non-teachers Included on TLR and School Questionnaire (SASS-3X) by Public Schools

Non-teacher Category	Number of 3Xs	Number of TLRs
• librarian	11	4
• other non-teacher	10	4
• pre-k	4	3
• principal / asst. principal	4	2
• guidance counselor	4	2
• speech therapist	2	4

Note: Three 3X questionnaires included persons with teaching **and** non-teaching duties. Two were guidance counselors and one was an other school staff person. The 3X instructed the respondent to do this, while the TLR instructions did not.

2. Private Schools

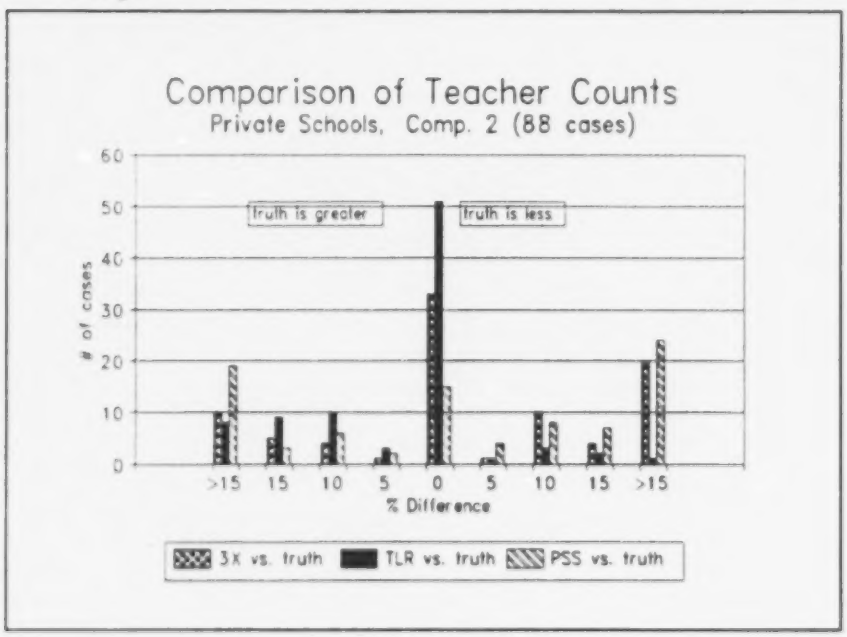
Of the 88 school TLRs, 51 contained the correct count of teachers in the school, and 55 were within 5 percent of the actual count. The SASS-3X count was correct for 33 cases, while 35 were within 5 percent of the truth count. The data suggest that the TLR counts are greater than the 3X counts, and both the TLR counts and the 3X counts are greater than the PSS counts (15 exact matches, 21 within 5 percent of the truth count). See table 12 and graph 6.

Table 12 Distribution of Private Schools by Percent Difference from Truth Count

Source of Data	No. of schools					
	0%	0<P≤5	5<P≤10	10<P≤15	P>15	total
3X quest.	33	2	14	9	30	88
school TLR	51	4	13	11	9	88
PSS count	15	6	14	10	43	88

- P = the percent difference from the truth count

Graph 6



Of the 98 private schools in the component 2 reinterview sample, we discovered that the schools **incorrectly excluded** the following types of teachers the most:

Table 13 Types of Teachers Excluded on TLR and School Questionnaire (SASS-3X) by Private Schools

Teacher Category	Number of 3Xs	Number of TLRs
• part-time	13	17
• general full-time	6	10
• subject matter	1	4
• Chapter 1	2	3
• specialized subject matter	0	4
• itinerant	3	0

We discovered that the schools **incorrectly included** the following types of non-teachers the most:

Table 14 Types of Non-teachers Included on TLR and School Questionnaire (SASS-3X) by Private Schools

Non-teacher Category	Number of 3Xs	Number of TLRs
• pre-k	13	1
• librarian	6	4
• other non-teacher	8	0
• principal / asst. principal	5	2
• other school staff	4	1
• guidance counselor	4	0

Note: Twenty-two 3X questionnaires included persons with teaching **and** non-teaching duties. (Two of the 22 contained two different types.) Twenty-one were from group (1) - principals, one was from group (2) - guidance counselor, and 2 were from group (6) - other school staff. The 3X instructed the respondent to do this, while the TLR instructions did not.

Attachment A-1
June 3, 1994

TLVS Sample

The public school sample was selected from the public school universe file that was going to be used for the school phase of the 1993 SASS. (The 1993 SASS was ultimately postponed until 1994.) Each public school's LEA was selected as well (for component 1, only). The private school sample was selected from the private school universe file that was current at that time (August 1992).

Before selecting the public and private school samples, we deleted schools in certain states from each of the universe files. These states had high field costs. The states are listed below.

States dropped from TLVS

- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Hawaii
- Idaho
- Kansas
- Louisiana
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Mexico
- New York
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Texas
- Utah
- Washington
- Wyoming

After we deleted the schools in the states listed above, we selected the samples. We selected the samples using the average teacher adjustment factor (TAF) from the 1990-91 weighting as a guideline. This adjustment factor is based on a weighted average of the ratio between the number of teachers reported on the school questionnaire (numerator) and the number of teachers reported on the TLR (denominator). The teacher adjustment factors for the public schools were at the state level, while the factors for the private schools were at the association membership (or affiliation) level (i.e., Catholic, Episcopal, Montessori, etc.).

For public schools, each state's TAF was defined as "good" if $0.9 \leq TAF \leq 1.1$, and defined as "bad" if $TAF > 1.1$ or $TAF < 0.9$. For private schools, each affiliation's TAF was defined as "good" if $0.8 \leq TAF \leq 1$ and "bad" if $TAF < 0.8$. "Good" and "bad" refer to how similar the teacher counts were on both the school questionnaire and TLR. The "bad" states and affiliations are listed on the next page.

Note: The private school TAFs were all less than 1. This was because the weighted average of counts from the teacher file (i.e., TLR counts) were always greater than the weighted average of counts from the school file (i.e., school questionnaire). After the sample was selected, errors were found on the private teacher file which made those counts greater than they were supposed to be.

"Bad", or Poor Reporting States

The following states were poor reporting states, in terms of reporting consistent teacher counts in the 1987-88 and 1990-91 SASS using the school questionnaire and the TLR.

- District of Columbia
- Georgia
- Illinois
- Iowa
- Massachusetts
- Michigan
- New Hampshire
- Rhode Island
- South Dakota
- Vermont
- Wisconsin

"Bad", or Poor Reporting Association Memberships (or Affiliations)

- Catholic
- Friends
- Episcopal
- National Society for Hebrew Day Schools
- Solomon Schechter Day Schools
- Other Jewish
- Evangelical Lutheran Church in America
- Other Lutheran
- American Association of Christian Schools
- National Association of Private Schools for Exceptional Children
- Montessori
- All Else

The public school sample contained a higher percentage of schools from the poor (or "bad") reporting states (70% poor, 30% good). The private schools contained a higher percentage of schools from the poor reporting affiliations (75% poor, 25% good). This guaranteed us of getting differences in counts in (at least) some of the schools.

In addition, schools from certain counties were dropped from the public school sample after sampling. These counties contain school districts that consistently had poor response rates (based on the 1987-88 and 1990-91 SASS). The counties are listed on the next page.

Attachment A-3
June 3, 1994

Counties dropped from the Public School Sample

- Baltimore MD
- Chesterfield County VA
- Dale County FL
- Hartford CT
- Howard County MD
- Jersey City NJ
- Madison WI
- Montgomery County MD
- Newark NJ
- New Haven CT
- Pinellas County FL
- Richmond VA

Attachment B-1
June 3, 1994

Teacher / Non-teacher Categories for the TLVS Report

Teachers

(1) part-time (regardless of subject/title taught)

Any teacher that was listed as part-time is included in this category, regardless of whether there was a subject listed. For example, if the respondent said that "we missed 3 part-time reading teachers", then they would be included in this category, since "part-time" was mentioned.

(2) general full-time (no subject/title given) / general teacher (no explanation at all)

For example, the schools simply reported that they "missed 3 teachers" or "we forgot to include a teacher". In other words, there was no explanation as to what kind of teachers they were (i.e., part-time, full-time, reading, math, etc.)

(3) Subject Matter (math, english, science, social studies) / Kindergarten / Elementary

(4) Specialized Subject Matter or Elective (PE/gym, music [band, orchestra, chorus/choir, instrumental], drama, vocational ed., industrial arts/tech, auto mechanics, carpentry, home ec., driver's ed., art, typing, army/ROTC instructor, ELP [English Limited Proficiency], ESL/bilingual, foreign lang., reading/reading specialist, computers, religion, business ed., health, special services teacher)

(5) Special Ed. (developmental reading, enrichment, basic skills, LD [learning disabled], IEU, behavior disorder, intermediate) / Gifted (exceptional, TAG) / College teacher for HS credit

(6) Itinerant (any subject) / Migrant teacher / Co-op

(7) Chapter 1

(8) Long-term substitute (no subject/title given)

(9) Other teacher (homebound, teacher employed by local govt., teacher employed by public school system that teaches in private school, non-paid/volunteers, non-certified teachers, teachers that teach in another building for this school, teachers on short-term leave [sick, personal day])

Non-teachers

(10) Principal / Asst. Principal / School Head / Dean of Students / President / other administrator / athletic director / coach

(11) Guidance counselor / other counselor

(12) Librarian / Media Specialist / Resource Person / Learning Center

(13) Speech Therapist/Teacher/Pathologist

(14) School Psychologist / Nurse / Physical Therapist

(15) Other school staff (secretary, service staff, para-professional, social worker, in-school supervision, AV coordinator, planetarium keeper, caseworker, work coordinator, special ed. coordinator)

(16) Pre-k / Pre-school / Director of Pre-school

(17) Teacher Aides / student teacher / tutors (home tutor) / LSS (Learner Support Strategist)

(18) Short-term substitute (no subject/title given)

(19) Other non-teacher (teacher on long-term leave [sick, disability, maternity], teach in another school/teach in another school under this school's principal, PE service that is not faculty, houseparents who teach their kids at home, different grade range on reinterview and original lead to difference, duplicate, teachers in school for different grade range than form, someone that gave lecture at school, teachers that teach at Tech. Institute in same building as school)

Listing of NCES Working Papers to Date

Number	Title	Contact
94-01	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-05	Cost-of-Education Differentials Across the States	William Fowler
94-06	Six Papers on Teachers from the 1990-91 SASS and Other Related Surveys	Dan Kasprzyk
94-07	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
95-01	Schools and Staffing Survey: 1994 papers presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk

Listing of NCES Working Papers to Date (Continued)

Number	Title	Contact
95-04	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings
95-06	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-08	CCD Adjustments to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk